STATE ORPHAN SITE

AAD DISTRIBUTION & DRY CLEANING SERVICES
2306 East 38th Street, Vernon
Los Angeles County, California, 90058-1627

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
SITE MITIGATION PROGRAM

May 2006

AAD Distribution and Dry Cleaning Services
2306 East 38th Street, Vernon
Los Angeles County, California, 990058-1627

SITE BACKGROUND

The former AAD Distribution and Dry Cleaning Services, Inc. (AAD) is located in the City of Vernon in Los Angeles County. Vernon is an industrial city which has over 1,200 businesses (primarily industrial) employing more than 44,000 people within its 5.2 square miles. There are very few residents in the city.

AAD consists of a 6,000-square-foot building on an 11,000 square-foot lot. The building housed offices and a concreted floored shop/warehouse area. The shop area consisted of a tetrachloroethylene (PCE) processing area, a drum washing area, and various drum storage areas.

A public sidewalk is immediately adjacent to AAD and less than 80 feet from the former PCE processing area. The former PCE processing area shares a common wall with an adjacent business to the west, American Bias, which employs approximately thirty onsite workers. An asphalt-covered parking lot is located to the east of the building. The parking lot is shared by AAD and its adjacent neighbor to the east, the former Rite Choice facility.

REGULATORY HISTORY

In December 2001, approximately 1,600 drums of hazardous wastes were removed from the abandoned AAD facility by the United States Environmental Protection Agency (USEPA) Superfund Emergency Response.

Beginning in 2002, the Department of Toxic Substances Control (DTSC) Southern California Permitting and Corrective Action Branch (SCPCAB) used fixed insurance funds to implement closure of permitted hazardous waste management units (HWMUs). Closure activities included the installation of six groundwater wells and fifty-two soil vapor probes. Groundwater, soil and soil gas samples were obtained. Chemicals detected in soil include: acetone, benzene, n-butylbenzene, sec-butylbenzene, isopropylbenzene, n-propyl-benzene, 1,2,4-trimethyl-benzene, 1,3,5-trimethyl-benzene, p-isopropyl-toluene, xylenes, naphthalene, PCE, and trichloroethylene (TCE). Among the detected compounds in soil, only the PCE concentration was above the preliminary remedial goal (PRG) level.

Soil gas samples were collected and analyzed using TO-14 and TO-3 methods. Chemicals detected in soil gas include: 1,2-dichloroethane, trichlorofluoromethane, benzene, ethyl benzene, chlorobenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, toluene, p,m-xylene, o-xylene, TCE, PCE and total volatile petroleum hydrocarbons (TVPH). Among the detected compounds in soil gas, PCE and TVPH were found at significant levels. The maximum detected concentrations for PCE and TVPH are 10,454 and 69,311 micrograms per liter (*ug*/l), respectively. PCE and TCE were detected in groundwater at concentrations up to 33 and 565 ug/l, respectively.

In October 2002, DTSC collected indoor air samples inside the AAD building and adjacent businesses, including American Bias, Rite Choice and Ideal Label Company. American Bias is located directly adjacent to the AAD building. Rite Choice is located adjacent to the AAD parking lot, and Ideal Label Company is located north of AAD, across the street. The maximum concentrations of these compounds detected in indoor ambient air were:

(a): vinyl chloride in the Rite Choice building (0.033 ug/m^3)
(b) 1,1-dichloroethene in American Bias building (0.17 ug/m^3)
(c) dichloromethane in the Ideal Label office (200 ug/m^3)
(d) chloroform in the Rite Choice building (0.38 ug/m^3)
(e) 1,1,1-trichloroethane in American Bias building (3.5 ug/m^3)
(f) 1,2-dichloroethane in the American Bias building (0.16 ug/m^3)
(g) benzene in the American Bias building (7.0 ug/m^3)
(h) trichloroethene in the American Bias building (0.57 ug/m^3), and
(i) tetrachloroethene in the American Bias building (380 ug/m^3).

The levels of dichloromethane, benzene, and PCE exceed the USEPA screening criteria for indoor air quality published as Table 1 in the October 2001 supplemental guidance document for *Evaluating The Vapor Intrusion to Indoor Air Pathway*. The USEPA screening criteria are based on the residential exposure scenario.

In May 2003, DTSC oversaw the installation of a soil vapor extraction (SVE) system as an interim removal action for AAD. The SVE system was designed to remove volatile organic compounds (VOCs). As of December 2005, an estimated 917.5 pounds of PCE and 11,559 pounds of TPH-g vapor had been removed. TPH had not previously been identified as a contaminant of concern, however, both dry cleaning and gas station waste products were accepted by AAD for recycling. The dry cleaning waste remained on site, while the gas station waste was segregated to the neighboring Rite-Choice facility. This waste is a potential source of the TPH contamination at AAD. The SVE system is currently in operation, however funds for its operation will end in March 2007. Funds for quarterly groundwater monitoring ended in August 2004.

In March 2006, DTSC completed a site characterization and a Baseline Human Health Risk Assessment (BHRRA) using State orphan funds. Soil, soil vapor and groundwater

samples were collected to evaluate current site conditions and perform a human health risk assessment.

The site characterization has identified chemicals of concern in the soil, soil vapor and/or groundwater at the site in the following maximum concentrations:

CONTAMINANT	CHSSL*/ PRG**/ MCL***/ TCLP****	CONCENTRATION (MAX)	EXCEEDANCE X's Action level
PCE (soil vapor)	0.47 ug/l*	13,000 ug/l	27,600
PCE (soil)	4.7 mg/kg**	11 mg/kg	2.3
PCE (groundwater)	5 ug/l***	4.85 ug/l	-
PCE (concrete)	700 ug/l****	3,000,000 ug/kg	4,285

*California Human Health Screening Levels-residential
**Preliminary Remediation Goals-residential soil
***Maximum Contaminant Level
****USEPA Toxicity Characteristic Leaching Procedure

The BHRRA concluded that AAD poses an exceedingly high risk of one-in-100 (10^{-2}) for potential on-site receptors and current commercial workers at the adjacent property.

The concrete inside the building is contaminated with PCE as high as 3,000,000 ug/kg. The possible exposure pathways for the contaminated concrete are inhalation and dermal contact. There is no health risk assessment for concrete. However, the levels detected in concrete exceed the hazardous waste determination level specified in Title 22, California Code of Regulations.

The levels of PCE in soil and soil vapor exceeded the California Human Health Screening and Maximum Contaminant Levels. TCE may cause nausea, blurred vision, and disturbance of the central nervous system that may result in cardiac failure. PCE can affect the central nervous system, cause liver damage and irritate skin and eyes after prolonged contact. Studies in experimental animals have shown both TCE and PCE to be carcinogenic.

ENFORCEMENT HISTORY

AAD was permitted in 1986 to manage dry cleaning wastes. In 1991, AAD submitted a permit renewal application for the permitted HWMUs listed as the cartridge stills and

PCE distillation area (also known as Containment A) and the container storage areas B, C, and D.

In November 1994, AAD conducted soil, soil vapor and groundwater investigations which detected releases of PCE at AAD. In September 1996, SCPCAB issued a unilateral corrective action order requesting AAD to conduct a site wide investigation and remediation. In 1999, an Interim Measures Workplan was approved. Soil vapor probes were installed to determine the extent of contamination and the preliminary soil vapor results were collected. The interim measures were not completed by AAD.

In February 2001, deficiencies in the permit renewal application for AAD kept the permit from being renewed. Subsequently, AAD was abandoned by its operator.

The operator of AAD, Harry Pourat, became a fugitive and is now deceased. The present owners of the property are two unclaimed trusts based in Oregon. At least one appears to be a revocable trust. The principals were two elderly ladies living in Oregon who have died. It appears that the beneficiaries have not taken possession of the facility. The attorney for the trusts is uncooperative and has stated that the trusts refuse to conduct closure or to be responsible for any costs of closure and corrective action.

In the absence of an operator and landowner, SCPCAB requested assistance from the Office of the Attorney General to determine if there were any Potentially Responsible Parties (PRPs) to remediate the site. SCPCAB identified the landowners and approximately 3,700 small generators who shipped PCE waste to the AAD site as PRPs. On October 23, 2003, the Office of the Attorney General concluded that there are no viable PRPS that can be pursued at this time. An Imminent and Substantial Endangerment Order Determination and Consent Order was issued to AAD on February 28, 2003.

SCHEDULE OF ACTIVITIES

The following activities are proposed for fiscal year 2006/2007: an enhancement to the existing soil vapor extraction (SVE) system with the installation of additional SVE wells inside the former AAD building; a limited removal of PCE contaminated soil and concrete and two rounds of groundwater monitoring activities. The activities are necessary to protect human health and the environment.

COST ESTIMATES

The cost estimate is based on the activities to be conducted during the Fiscal Year 06/07. The total cost for FY006/07 is $385,000.00. The details of the estimate are in Exhibit II.

ACTIVITY	COST FY 06/07
Limited Soil and Concrete Excavation and Disposal	$ 126,000
SVE, Biovent, Sub-slab installations and Start up	$ 180,000
Groundwater Monitoring and Disposal	$ 25,000
Contingency	$ 66,000
TOTAL COST	**$ 397,000**

PUBLIC REPRESENTATIVES

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